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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,345	10/24/2003	Ya-An Cheng	39524.8400	2720

20322 7590 06/12/2007

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EXAMINER	
CHENG, PETER L	
ART UNIT	**PAPER NUMBER**
2609	

MAIL DATE	DELIVERY MODE
06/12/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/693,345	CHENG, YA-AN	
	Examiner	Art Unit	
	Peter L. Cheng	2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 October 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,17,20,21 and 36* is/are rejected.

7)☒ Claim(s) *3-16,18,19,22-35* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 October 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

   - There are some typographical and grammatical errors in the disclosure; for example, **page 2, line 1** ("transfer to two digital parameters");

Appropriate correction is required.

Claim Objections

2. Claims 2 – 19, 21 – 36 are objected to because of the following informalities:

   - Regarding the usage of the **"wherein"** clause,

   The subject matter of a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined. As a general matter, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. The following are examples of language that may raise a question as to the limiting effect of the language in a claim:

   (A) statements of intended use or field of use,
   (B) "adapted to" or "adapted for" clauses,
   (C) "wherein" clauses, or
   (D) "whereby" clauses.

   This list of examples is not intended to be exhaustive. See also MPEP § 2111.04.

   Therefore, **"wherein"** should be removed.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4. Claims 1, 2, 17, 20, 21, 36 are rejected under 35 U.S.C. 102(a) as being anticipated by **Gonsalves [US Patent Application 2002/0041709 A1]**..

As for claims 1 and 20, Gonsalves teaches a method of color calibration for calibrating an input color into a target color, the target color being represented by a first coordinate pair (X1, Y1) in a color coordinate system [“Then the target color 18 is also converted to YUV space by the same conventional transform”; **page 4, paragraph 39, lines 1 – 2;** also, see **Equation 2** on **page 4, paragraph 39;** target chrominance “tU” corresponds to X1; target chrominance “tV” corresponds to Y1], the method of color calibration comprising the steps of

> **(1) inputting the input color, the input color being represented by a second coordinate pair (X2, Y2) in the color coordinate system** [“The RGB representation of the color of the input pixel is first converted to YUV space”; **page 4, paragraph 52, lines 1 –2;** also, see **Equation 13, page 4;** input chrominance “inU” corresponds to X2; input chrominance “inV” corresponds to Y2]

and being adjusted by a saturation parameter Pb and a chrominance parameter Pr [Equations 14, page 4, paragraph 53; the input chrominance values **inU** and **inV** are scaled by chrominance adjustment terms **cm0**, **cm1**, **cm2** and **cm3**; chrominance adjustment terms **uAdjust** and **vAdjust** correspond to saturation **Pr** and chrominance **Pb** parameters, respectively**];**

(2) respectively comparing X1 with X2 and comparing Y1 with Y2 to obtain a state [Fig. 2, step 24 (Difference Calculator); a difference (or "state") between the source (input) color and target color are computed to identify offsets in the values of the color components; **page 1, paragraph 16, lines 3 – 5;]; and**

(3) respectively adjusting the saturation parameter Pb and the chrominance parameter Pr in response to the state until X1 = X2 and Y1 = Y2 [The chrominance adjustment terms **cm0**, **cm1**, **cm2**, **cm3**, **uAdjust**, and **vAdjust,** which are produced by the aforementioned "difference calculator" and define a "state", are then used in **Equations 14 (page 4, paragraph 53)** to produce updated **X2** (that is, "**outU**") and updated **Y2** (that is, "**outV**");

Regarding claims 2 and 21, Gonsalves further teaches the method of color calibration of claim 1, wherein the step (2) further comprises:

(2.1) subtracting X1 from X2 to derive a first value;

(2.2) subtracting Y1 from Y2 to derive a second value; and

(2.3) evaluating the first value and the second value [Fig. 2, step 24 (Difference Calculator); a difference (or "state") between the source (input) color and target color are computed to identify offsets in the values of the color components; **page 1, paragraph 16, lines 3 – 5;].**

Regarding claims 17 and 36, Gonsalves further teaches the method of color calibration of claim 1, wherein the step (3) further comprises:

(3.3) adjusting the chrominance parameter Pr until X1 = X2 and Y1 = Y2. [Equations 14, page 4, paragraph 53; the input chrominance values **inU** and **inV** are scaled by chrominance adjustment terms **cm0**, **cm1**, **cm2** and **cm3**; chrominance adjustment terms **uAdjust** and **vAdjust** correspond to saturation **Pr** and chrominance **Pb** parameters, respectively**]**

Gonsalves further teaches that "other suitable color spaces and their dimensions include RGB: red, green and blue; CMYK: cyan, magenta, yellow and black; and YCrCb: luminance and chrominance. If the color space or precision of all the inputs to the color changing module 10 are not the same, they should first be converted to a convenient color space"; **page 3, paragraph 30; lines 8 – 13.** In addition, "the difference calculator 24 of embodiments receiving inputs represented in other color representations spaces should be made to match the input color representation space. It should be recognized by the skilled artisan that following references herein to HSL space and its dimensions are given by way of example only, as the described

techniques can be altered to use any suitable color space in which a particular embodiment is made to operate"; **page 3, paragraph 33, lines 8 - 15].**

Allowable Subject Matter

5. Claims 3 – 16, 18, 19, 22 - 35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter L. Cheng whose telephone number is 571-270-3007. The examiner can normally be reached on MONDAY - FRIDAY, 8:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

plc

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